**Appendix 4.1: Forestry** 

# **Appendix 4.1: Forestry**

# Introduction

1.1 This Appendix of the Environmental Impact Assessment (EIA) Report provides information on the forest and woodland areas affected by the construction and operation of the proposed An Carr Dubh Wind Farm (the 'Proposed Development').

1.2 This Appendix has been prepared by Neil McKay MICFor, Director of Neil McKay Forestry Consultant Limited, a professional member of the Institute of Chartered Foresters (ICF) since 1994 with more than 35 years' forestry practice in the public and private sectors throughout Scotland. Neil McKay has ten years' experience producing forestry inputs for EIA Reports for renewable energy and energy transmission infrastructure developments across Scotland.

**1.3** Commercial forests are dynamic, and their structure continually undergoes change due to normal felling and restocking by the landowner; natural events, such as windblow, pests or diseases; and external factors, such as a wind farm development. Whilst forestry is not regarded as a receptor for the purposes of the EIA the effects associated with felling have, however, been considered in the specialist assessments where relevant as noted below and this Appendix provides details of felling that will be required for the construction and operation of the Proposed Development. The changes to the forest structure are also described as well as any forestry waste generated. The forestry proposals are interlinked with environmental effects which are outside the scope of this Appendix but which should be read in conjunction with the following EIA Report chapters:

- Chapter 3: Site Selection and Design Strategy;
- Chapter 6: Landscape and Visual Impact Assessment;
- Chapter 7: Hydrology, Geology, Hydrogeology and Peat;
- Chapter 8: Ecology;
- Chapter 9: Ornithology; and
- Chapter 10: Cultural Heritage
- 1.4 This Appendix is supported by a photographic record provided at the end of the document, as well as the following figures:
- Figure 4.1.1: Location – Coille Bhraghad;
- Figure 4.1.2: Baseline Forestry;
- Figure 4.1.3a and 4.1.3b: Felling for Wind Farm Access; and
- Figure 4.1.4a and 4.1.4b Felling within Ancient Woodland and PAWS.

1.5 While the turbines and ancillary infrastructure of the Proposed Development are located outside forestry and woodland, the proposed access is partially located in areas of woodland. This Appendix identifies areas of forest to be permanently removed for the access during construction and operation of the Proposed Development and outlines proposed management practices for felling, as well as identifying the compensatory planting requirements and subsequent aftercare. The forestry proposals have been developed to:

- Identify those areas which will be felled as a result of the Proposed Development, and which will be permanently lost; and
- Demonstrate how the Proposed Development fits within the future forest structure.

# Legislation, Policy and Guidance

1.6 This Appendix has been informed by consultation responses summarised in Table 4.1.1, information provided by the landowner's forestry agent and the following guidelines/policies:

- <sup>6</sup> The Scottish Government (Scottish Forestry) (2019) Scotland's Forestry Strategy 2019-2029 [online]. Available at:
- https://www.gov.scot/publications/scotlands-forestry-strategy-20192029/ [Accessed 31/10/2022]

The Scottish Government (Scottish Forestry) (2020) Scotland's Forestry Strategy Implementation Plan 2020-2022 [online]: Available at: https://forestry.gov.scot/publications/793-scotland-s-forestry-strategy-implementation-plan-2020-2022 [Accessed 18/02/2022]

<sup>8</sup> Forestry and Land Management (Scotland) Act 2018. Available at: https://www.legislation.gov.uk/asp/2018/8/contents/enacted

- Forestry Commission<sup>1</sup> Scotland (2019) Scottish Government's policy on control of woodland removal: implementation quidance<sup>2</sup>;
- Forestry Commission Scotland (2009) The Scottish Government's Policy on Control of Woodland Removal, Edinburgh<sup>3</sup>;
- Forestry Commission (2017) The UK Forestry Standard: The Government's Approach to Sustainable Forestry, 4<sup>th</sup> Edition. Forestry Commission, Edinburgh<sup>4</sup>;
- Forestry Commission (2017) The UK Forestry Standard Guidelines<sup>5</sup>;
- The Scottish Government (2019) Scotland's Forestry Strategy 2019-2029<sup>6</sup>;
- The Scottish Government (2020) Scotland's Forestry Strategy Implementation Plan 2020-2022<sup>7</sup>;
- Forestry and Land Management (Scotland) Act 2018<sup>8</sup>;
- The Scottish Government (2011) Scottish Land Use Strategy<sup>9</sup>;
- The Scottish Government (2023) Scotland's Fourth National Planning Framework (NPF4)<sup>10</sup>
- SEPA (2017) SEPA Guidance Notes WST-G-027 Management of Forestry Waste<sup>11</sup>;
- SEPA (2014) LUPS-GU27 Use of Trees Cleared to Facilitate Development of Afforested Land<sup>12</sup>;
- UKWAS (2017) The UK Woodland Assurance Standard, Fourth Edition, UKWAS<sup>13</sup>;
- Argyll and Bute Council, Local Development Plan 2015<sup>14</sup>; and
- Argyll and Bute Woodland and Forestry Strategy 2011 (ABCWFS)<sup>15</sup>.

### Consultation

1.7 Table 4.1.1 summarises the consultation responses received in relation to forestry and provides information on how they have been addressed in this assessment.

1.8 Full details on the consultation responses can be reviewed in Appendix 2.1: Consultation Response Table.

**Table 4.1.1: Consultation Responses** 

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
Scottish Forestry 17/05/2021	Scoping	There is a strong presumption in favour of protecting Scotland's woodland resources and the Scottish Government provides policy direction in the policy of control of woodland removal. The first consideration for the applicant should be whether the underlying purpose of the proposal can reasonably be met without resorting to woodland removal. The removal of large areas of woodland will not be supported. The chapter should describe the baseline conditions of the forest, including its ownership. This will include information on species composition, age class structure, yield class and other relevant crop information. The chapter should describe	The tree felling is for the access for the Proposed Development only and follows, wherever possible, the existing forest tracks with some widening on bends for oversail and smoothing out of alignments. One section of new alignment through the forest crop along the main access, east of Steallair Bàn Loch, is required to avoid a bend and bridge on the existing forest track. No large areas of felling are required for the access of the Proposed Development. Baseline composition of the forest is included within this Appendix. This forestry assessment covers the access to the Proposed Development only.

<sup>9</sup> The Scottish Government (2021) Scottish Land Use Strategy: Land use – getting the best from our land: strategy 2021 to 2026 [online]. Available at: https://www.gov.scot/publications/scotlands-third-land-use-strategy-2021-2026-getting-best-land/ [Accessed 31/10/2022] <sup>10</sup> The Scottish Government (2023) Approved NPF4 available at https://www.transformingplanning.scot/national-planning-framework/approved-

npf4/ (online)

on 31/10/2022]

<sup>12</sup> SEPA (2014) Use of Trees Cleared to Facilitate Development on Afforested Land. Available at www.sepa.org.uk/media/143799/use of trees cleared to facilitate development on afforested land sepa snh fcs guidance- april 2014.pdf. [Accessed on 31/10/2022]

<sup>13</sup> UKWAS (2017), UK Woodland Assurance Standard. Available at ukwas.org.uk/wpcontent/uploads/2018/05/UKWAS Standard FourthEdition digital.pdf. [Accessed on 31/10/2022] <sup>14</sup> Argyll and Bute Council (2015) Adopted Local Development Plan. Available at www.argyll-bute.gov.uk/planning-and-environment/localdevelopment-plan. [Accessed on 31/10/2022]

<sup>15</sup> Argyll and Bute Council (2011) Argyll and Bute Woodland and Forestry Strategy. Available at www.argyllbute.gov.uk/moderngov/mgConvert2PDF.aspx?ID=55380. [Accessed on 31/10/2022]

<sup>11</sup> SEPA (2017). Management of Forestry Waste V3. Available at www.sepa.org.uk/media/143845/forestry waste guidance note.pdf. [Accessed

<sup>&</sup>lt;sup>1</sup> Forestry Commission was formerly responsible for Forestry in England, Wales and Scotland, however on 1 April 2013, Forestry Commission Wales merged with other agencies to become Natural Resources Wales, whilst two new bodies (Forestry and Land Scotland and Scotlish Forestry) were established in Scotland on 1 April 2019. The publications referenced were under the names of the agencies or authorities at the time

<sup>&</sup>lt;sup>2</sup> Forestry Commission Scotland (2019) Scottish Government's policy on control of woodland removal: implementation guidance [online]. Available at: https://forestry.gov.scot/images/corporate/pdf/Implementation-Guidance-Control-of-woodland-removal.pdf [Accessed 31/10/2022] <sup>3</sup> Forestry Commission Scotland (2009) The Scottish Government's Policy on Control of Woodland Removal, Edinburgh

<sup>&</sup>lt;sup>4</sup> Forestry Commission (2017) The UK Forestry Standard: The governments approach to sustainable forestry [online]. Available at: https://www.gov.uk/government/publications/the-uk-forestry-standard [Accessed 31/10/2022]

Forestry Commission Scotland (2009) The Scottish Government's Policy on Control of Woodland Removal, Edinburgh.

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken	Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
		<ul> <li>the changes to the forest structure, the woodland composition and describe the work programme:</li> <li>The proposed areas of woodland for felling to accommodate the proposed infrastructures, including access roads, tracks, underground pipes and cables and any ancillary structures. Details of the area to be cleared around those structures should also be provided, along with evidence to support the proposed scale and phasing of felling.</li> <li>Trees felled must be replanted onsite or compensated for (off-site planting) and these areas must be clearly identified in the plan. On-site replanting must always be considered first. The replanting operations must be appropriately described, including changes to the species composition, age class structure, timber production and traffic movements. Tree/shrub species must be suited to the site and the objectives of management.</li> <li>Areas of open ground in the forest that are designed for biodiversity or landscape enhancement or for recreation opportunities should not be considered for on-site replanting (to compensate for woodland removal in other parts of the forest).</li> <li>A long term forest plan should be provided as part of the EIA Report (as a technical appendix for context) to give a strategic vision to deliver environmental and social benefits through sustainable forest management and describes the major forest operations over a 20 year period.</li> <li>The Scottish Government expects all forestry plans and operations. Both felling operations and on and offsite compensatory planting must be carried out in accordance with good forestry practice. The EIA Report must clearly state that the project will be developed and implemented in accordance with good forestry practice. The EIA Report must clearly state that the project will be developed and implemented in accordance with good forestry practice.</li> </ul>	Response/Action Taken No felling is required for other infrastructure. The applicant recognises the requirement for compensatory planting and is investigating the opportunities for this within the Site as detailed further below. Compensatory planting is being considered in conjunction with habitat management and enhancement measures within the Site (see Appendix 8.5: Outline Restoration and Enhancement Plan [OREP]). The tree felling for the Proposed Development is, in the main, a modification of the existing forest tracks and has no significant implications to the current forest management. It is therefore not considered that a long term forest plan is required in this instance. Compensatory planting will be carried out in accordance with the UK Forestry Standards (UKFS).	Date         Scottish Environment Protection Agency 28/05/2021         Argyll Estates 17/03/2022         Forestry Stu 1.9 The Forestri illustrated on Fig 1900 to 2020.         1.10 Coille Bhrag 2005 to 2025. Th Inveraray, within Proposed Develor developed after ti 1.11 The wind har rooting is restricted sheltered sites at shallower and we forest upper marg         1.12 The long-tee interests from the conifer woodland with meeting the         1.13 Existing cro data provided inco 4.1.2 shows the at 1.14 Site inspect discussion includ         1.15 The Coille B access follows, w	Consultation Consultation Scoping Scoping Site visit, access walkover Consultation Consultation Site visit, access walkover Consultation Consultatio Consultatio Consultation	as being of high horticultural value, including "for its variety and abundance of trees and for its vast commercial plantations". <sup>16</sup> Unable to provide detailed advice due to cyber-attack, but provided link to standing advice and planning guidance <sup>17</sup> . Discussion on detail of the woodland on site with preferences and constraints noted by Argyll Estates. <b>Current Forest Plan</b> onfined to the woodlands known as Coille Bhra woodlands include part of the GDL for Inverary Argyll Woodland Long Term Forest Plan (LTFF d areas covered by the LTFP are located on the len Aray, together with outlying woodlands to the d to be 2027 (i.e. after the current LTFP), and it ds, following the current pattern of felling phase n <sup>18</sup> reaches a maximum of hazard class 4 to 5 asses decrease on the better soils on the slope Over much of the area, the hazard class is inc ard class for the access ranges from 2 at the lo TFP is to manage the forest with a balanced e practicing sound silvicultural activities. There is g a valuable timber crop for saw logs and firewo buld help lessen the impact of climate change of forestry plantation within the Site was provided tment schedules showing planting year, specie bille Bhraghad woodlands. aken in March 2022 to review the proposed accu- uirements for the Proposed Development and v and is the only woodland that will be affected by e existing forest tracks with locations identified to the state only woodland that will be affected by	SEPA guidance to the management of forestry waste will be followed:         • SEPA (2013) SEPA Guidance Notes WST-G-027: Management of Forestry Waste; and         • SEPA (2014) LUPS-GU27: Use of Trees Cleared to Facilitate Development of Afforested Land.         The access design has considered the Estate's requirements.         ghad, part of Argyll Estates, Inverary. This is Castle and have a planting year range from Pre         P), reference no. 032900090, which runs from e west side of Loch Fyne adjacent to the town of the south of Inveraray. Construction of the tis assumed that a subsequent LTFP will be es.         on the hill tops where exposure is high and s and there are areas of hazard class 2 on more reased by restricted rooting on areas of wer elevation to 4 where the access departs the mphasis on commercial and biodiversity of the bod material. The focus on diversity will assist on the estate in the future.         by the landowner's forestry agent. The forest s, yield class and areas in hectares. Figure         exess with the landowner's agent. Detailed that mitigation measures will be required.
				access follows, w of existing forest the upper forest b <b>1.16</b> The felling	where possible, the tracks does not m poundary, then a r requirements for th	e existing forest tracks with locations identified eet the requirements of abnormal loads or whe new track will be formed with tree felling as requ ne Proposed Development are minimal and are	for widening as required. Where the alignment are the existing forest track does not extend to uired. The mainly integral with the current forest tracks; it
		the context of the surrounding woodland environment.		is therefore consi Existing Con		n forest plan is not required, and no amendmen	Its to the existing LIFP are proposed.
Historic Environment Scotland 11/05/2021	Scoping	Note that part of the Proposed Development is located within the Inveraray Castle Garden and Designed Landscape (GDL 00223) which is identified	The forestry assessment includes recognition of the woodlands included in the GDL.			confirmed the following details:	

 <sup>&</sup>lt;sup>16</sup> http://portal.historicenvironment.scot/designation/GDL00223
 <sup>17</sup> www.sepa.org.uk/environment/land/planning

<sup>18</sup> Forest Research Wind hazard classification www.forestresearch.gov.uk/publications/archive-windthrow-hazard-classification-fc-leaflet-85-1985

- Scottish Forestry Map Viewer<sup>19</sup> confirms the presence of the Argyll Woodlands Management Plan, which includes Coille Bhraghad.
- Native Woodland Survey of Scotland (NWSS) data set includes areas of native woodland within Coille Bhraghad: these include Plantations on Ancient Woodland Sites (PAWS), planted with non-native species during the 20th century. Areas of PAWS in the lower section above Inveraray include both mixed conifers and mixed broadleaved trees with planting dates from pre 1900 to 2019. PAWS in the upper section are typically Sitka spruce planted in 1998.
- Ancient Woodland Inventory (AWI) Scotland<sup>20</sup> dataset includes areas of ancient woodland (AWI 1a and 2a) within Coille Bhraghad. mainly listed as Long-established (of native origin) from Roy Maps of 1860 AWI 1b and 2b) AWI and NWSS (PAWS) overlap with the same woodland area listed as semi-natural and non-native species planted during the 20<sup>th</sup> century. PAWS areas within Coille Braghad include pre 1900 mixed broadleaves with some mixed conifer planted in 2019 in the lower section. The upper areas are mixed conifer, mainly Sitka spruce, planted between 1983 and 2002.
- Most of Coille Bhraghad lies within the Inveraray Castle Inventory Garden and Designed Landscape (GDL) (Reference GDL00223). The inventory refers to Ballantyre Wood, which is the north east extremity of Coille Bhraghad, being planted in 1888 with exotic conifers including Douglas fir and giant fir.
- Argyll Woodlands Management Plan area is described as 1341.85 ha with Coille Bhraghad amounting to 673.38 ha (Figure) 4.1.1).
- Coille Bhraghad is mixed species and extended age classes as illustrated in Figure 4.1.2 and Table 4.1.2 below.

Table 4.1.2: Coille Bhraghad compartment schedule by age class and area (ha)

Age Class	Area ha
Pre 1900	48.24
1950-1954	16.47
1955-1959	64.46
1960-1964	23.69
1965-1969	28.65
1970-1974	48.48
1975-1979	3.77
1980-1984	18.94
1985-1999	56.87
1989-1994	6.19
2000-2004	11.25
2005-2009	47.23
2010-2013	27.16
2010-2014	31.21
2015-2019	87.34
2020-2024	15.07
Bare ground	122.63
Fallow awaiting replanting	15.48
Rhododendron	0.25
Total area (ha)	673.38

1.18 As noted above, a field survey was carried out in March 2022 with The Applicant and representatives of Argyll Estates. A walkover though the route on existing forest tracks was undertaken to confirm the findings of the desk based data and review the impact on trees and woodland adjacent to the access route. The walkover also confirmed the desk based review. Specifically, the walkover considered if any larger scale felling would be required to achieve a wind firm boundary.

**1.19** The survey confirmed that felling impacts will be minimal and where coniferous crops required limited felling the tree height was such that windthrow risk will also be minimal. As such, no larger scale felling to wind firm edges was identified as being required.

# The Proposed Development Felling Plan

1.20 The Proposed Development felling plan is shown in Figure 4.1.3a and 4.1.3b. This Figure illustrates the total area to be felled for the access track only, as there is no felling required for the turbines or other infrastructure. The total area of felling required is 3.77ha

**1.21** The area of woodland to be felled has been determined through the swept path analysis and the infrastructure footprint required to achieve access. Where the existing forest tracks provide a suitable alignment, some tree felling is generally required to provide an area for the access track improved running surface. This includes a widening to oversail limits beyond the infrastructure footprint close to the site of the memorial to Wren Gertrude Canning at Grid Reference: NN 08323 07582, although there will be no direct effects on the monument itself (discussed further in Appendix 10.1: Historic Environment Assessment of the EIA Report). There are three short sections of new track alignment through the forest crop along the access (at NGR 207695 708434 to facilitate a right angle turn of the track as it heads north-west, east of Steallair Ban Loch at NGR 207253 708943 to avoid a bend and bridge on the existing forest track, and at NGR 207270 710108 where the track exits the forest). The coniferous forest crops in these locations are not considered at risk of windthrow and require felling for the track only.

**1.22** The presence of AWI has been taken into account in designing the access, with a view to minimising the felling requirements as much as possible. However, of the total 3.77ha required to be felled, 3.19ha of the felling area is listed within AWI with an overlapping area of 1.47ha within the AWI also listed as PAWS with 0.01ha shown as PAWS only. This is illustrated on Figures 4.1.4a and 4.1.4b.

1.23 Two existing borrow pits located on the access are proposed for use however there is no requirement for further tree felling to accommodate these.

1.24 Where tree felling is to be undertaken for the Proposed Development the tree crops are considered to be adequately wind firm and do not require further felling to a wind firm edge.

# Permanent Felling

**1.25** Permanent felling is restricted to an area of 3.77 ha. These areas will not be replanted as the infrastructure footprint associated with the swept path design is required for both the construction phase and the operational phase of the Proposed Development. Replanting within these areas is not possible with the requirement to keep the swept path available for future abnormal load deliveries, should they be needed. It may be possible to replant small areas with low growing shrubs, however, this detail is not included in the calculation of permanent felling.

**1.26** The age and species of the tree crops to be felled is variable from mature broadleaved trees to immature coniferous plantations. Of the 3.77ha to be felled, 3.19ha is classified as Ancient Woodland. Within this, 1.47ha is classed as PAWS in the NWSS. An additional 0.01ha is shown as PAWS outside AWI. The remaining 0.57ha is plantation forestry which does not appear within AWI or NWSS. The breakdown of the woodland types by broadleaved woodland and coniferous plantation and an estimate of the tonnage released is included in Table 4.1.3.

Table 4.1.3: Felling for the Proposed Development

Coille Bhraghad Felling	Area (ha)	Tonnes
Broadleaved Felling	0.96	76.00
Conifer plantation Felling	2.81	211.00
Total	3.77	286.00

<sup>19</sup> Scottish Forestry Map Viewer. Available at: https://scottishforestry.maps.arcgis.com/apps/webappviewer

<sup>&</sup>lt;sup>20</sup> A guide to understanding the Scottish Ancient Woodland Inventory (AWI). Available at https://www.nature.scot/doc/guide-understandingscottish-ancient-woodland-inventory-awi

#### **Proposed Development Restocking Plan**

**1.27** Replanting in situ is not planned as unrestricted access will be required for the lifetime of the Proposed Development. To ensure there is no net woodland loss, compensatory planting is proposed within the Site as detailed further below.

# **Requirement For Compensatory Planting**

**1.28** As a result of the construction of the Proposed Development there will be a net loss of woodland area. The area of stocked woodland in the study area will decrease by 3.77 ha.

**1.29** The Scottish Government's Control of Woodland Removal Policy (CoWRP) and other relevant guidance state that minimal woodland removal should be undertaken to facilitate new development. The CoWRP advises that the Proposed Development falls into the category of woodland removal with a need for compensatory planting.

**1.30** Compensatory planting (CP) is calculated in accordance with Annex 5 of the Scottish Government's Policy on Control of Woodland Removal: implementation guidance February 2019<sup>21</sup>. Accordingly, compensatory planting arrangements will be provided for 3.77 ha.

**1.31** CP arrangements for the total amount, which meet the UK Forestry Standards, are being sought within the Site boundary and will be presented as a planting plan for approval by SF. The CP plan will include the design of the CP, the species selection, site cultivation and planting programme. The CP plan will describe the protection methods and subsequent maintenance to achieve the success of these woodland areas. Compensatory planting is being considered in conjunction with the OREP.

# **Forestry Waste**

**1.32** The Scottish Environment Protection Agency (SEPA) guidance document WST-G-027 (V3) Management of Forestry Waste highlights that all waste producers have a statutory duty to adopt the waste hierarchy as per the Waste (Scotland) Regulations 2012, which amended Section 34 of the Environmental Protection Act (EPA) 1990 (duty of care) (UK Government, 1990). Further guidance is contained within SEPA Guidance Notes WST-G-027 Management of Forestry Waste and SEPA (2014) LUPS-GU27 Use of Trees Cleared to Facilitate Development of Afforested Land.

**1.33** A hierarchy of uses for forestry materials is proposed, derived from the waste hierarchy contained within the Regulations, summarised as follows:

- prevention via the production of timber products and associated materials for use in timber and other markets;
- the re-use of materials on Site for a valid purpose, where such a use exists e.g. road construction;
- there is no valid re-cycling use for forestry residues;
- other recovery via collection and use as biomass for energy recovery or other markets, where not included above; and
- where no valid on or off-Site use can be found for the material, disposal would be in a way that is considered to deliver the best overall environmental outcome.

**1.34** Approximately 1.58 ha of the areas to be felled are mature timber with 2.19 ha premature conifer plantation, all utilisable material from timber harvesting will be exported from the Site to appropriate wood processing mills nearby. The area of younger trees will be treated in accordance with the marketing opportunities at the time, such as for biomass. Any residue will be treated in accordance with the guidance on forestry waste management.

# **Forest Management Practices**

### **Crop Clearance**

**1.35** Tree crop clearance will be carried out by competent forestry specialists adhering to relevant safety and environmental guidelines. Tree harvesting will utilise the most suitable systems at the time of felling with the forest products uplifted by roadgoing timber lorries and delivered to the appropriate wood or biomass markets.

### **Planting Methodology**

**1.36** The CP planting area will typically be prepared for planting by the production of suitably sized mounds following relevant safety and environmental guidelines. During cultivation, any drains to manage water run-off will be installed to meet the Forest and Water guidelines. Planting will be by manual means with trees firmly planted on mounds.

**1.37** Maintenance to achieve successful establishment of the successor crop will include plant surveys to meet the required number and distribution of tree survival. Where necessary, "beating up" will take place. Beating up is the replacement of any failed trees to maintain the correct number of trees.

### **Deer Control**

**1.38** As deer are likely to be onsite, deer fencing should be erected, with any bird collision mitigation. Should tree damage occur by the deer onsite, they will be culled to where tree damage is at an acceptable level to produce a future woodland and to maintain and enhance the biodiversity within the woodland areas. Deer control will be undertaken, where necessary, by suitably trained and competent deer stalkers. Guidance provided by the NatureScot (formerly Scottish Natural Heritage) Code of Practice on Deer Management<sup>22</sup> and as updated, will be followed.

#### **Public Access**

**1.39** Public access within the forest is locally established. This is likely to be improved due to the access tracks for the Proposed Development once operational.

#### **Standards and Guidance**

**1.40** All forestry operations will be conducted in accordance with current good practice guidelines. This will include, but is not limited to:

- The UK Forestry Standard and the supporting guidelines:
  - Forests and Biodiversity;
  - Forests and Climate Change;
  - Forests and Historic Environment;
  - Forests and Landscape;
  - Forests and People;
  - Forests and Soil; and
  - Forests and Water.
- Scottish Natural Heritage Code of Practice on Deer Management.

# Summary

**1.41** The woodlands within the Site are part of Argyll Woodlands covered by a LTFP. This woodland area is known as Coille Bhraghad and covers some 673.38 ha. The range of planting years is from pre 1900 to present as the LTFP is still active in felling and replanting.

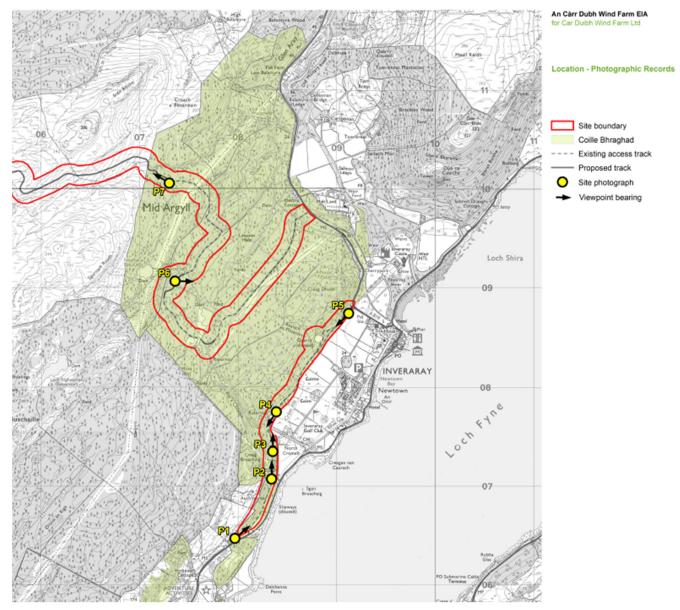
**1.42** Felling of 3.77 ha is required for the construction and operation of the Proposed Development. This area of permanent woodland loss is the calculated area to be taken forward for compensatory planting complying with the Scottish Government's Control of Woodland Removal Policy.

**1.43** Of the 3.77ha to be felled, 3.19ha is classified as Ancient Woodland. Within this, 1.47ha is classed PAWS in the NWSS with 0.01ha PAWS outside AWI. The remaining 0.57ha is not classified within AWI or NWSS. While the significance of the woodland designations is recognised it should be noted that 2.81ha of the total felling area is coniferous plantation.

**1.44** The Applicant is committed to providing 3.77 ha of appropriate compensatory planting and has sought agreement with the landowners. The exact location, the extent and design will meet the requirements of UKFS guidance and a detailed Planting Plan will be provided for approval by SF. Compensatory planting is being considered in conjunction with the OREP.

<sup>&</sup>lt;sup>21</sup> Available at: https://forestry.gov.scot/publications/349-scottish-government-s-policy-on-control-of-woodland-removal-implementation-guidance

# Forestry Photographic Records





Photograph 1. Track off A83 OS Grid Ref: NN 07959 06462. View N



Photograph 2. Felled and replanted area adjacent to track. OS Grid Ref: NN 08341 07057. View NE



Photograph 3. Conifer compartments. OS Grid Ref: NN 08358 07352. View N



Photograph 4. Substation. OS Grid Ref: NN 08391 07746. View NE



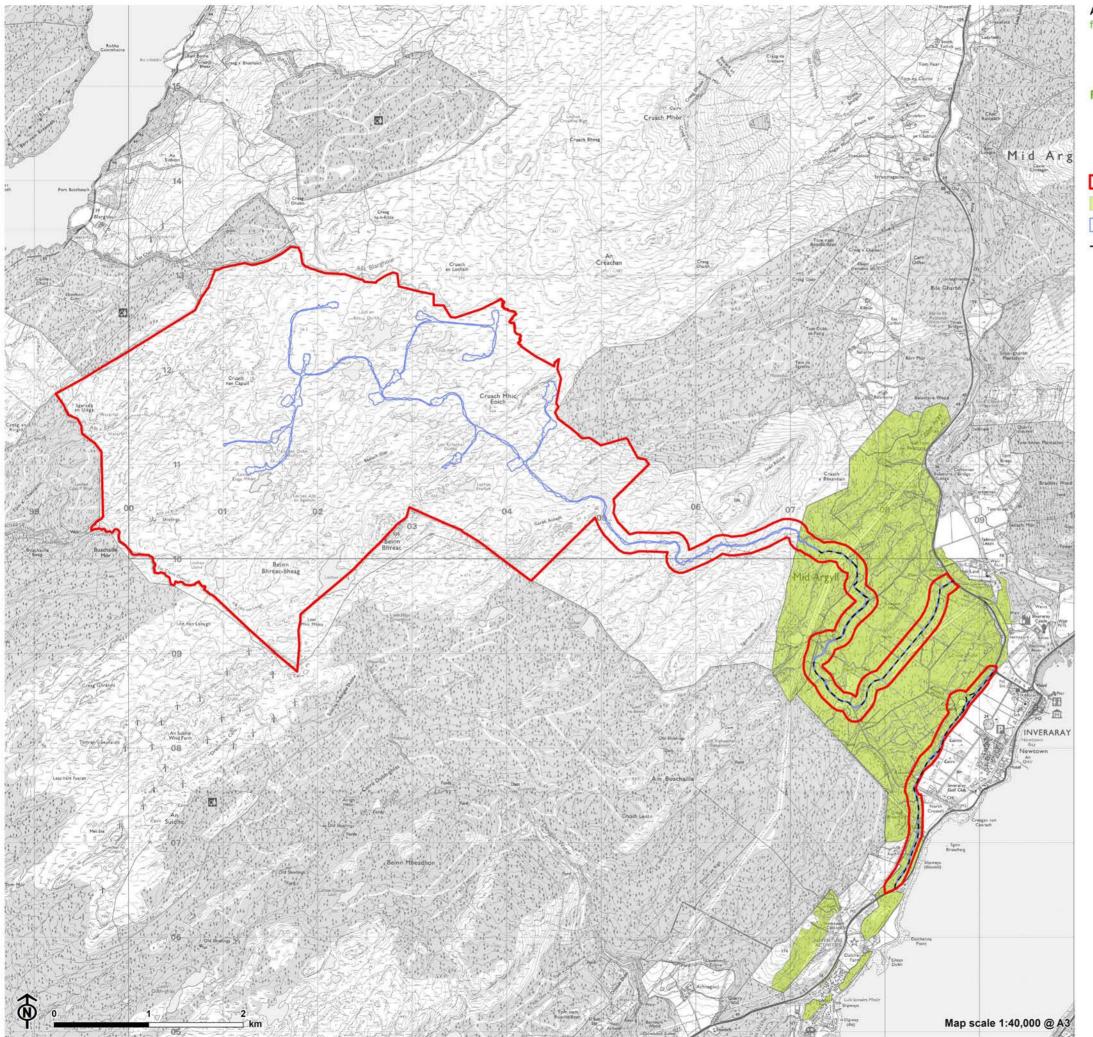
Photograph 5. Mature conifer. OS Grid Ref: NN 09116 08727. View SW



Photograph 6. New track alignment. OS Grid Ref: NN 07357 09080. View E



Photograph 7. Extension to forest boundary. OS Grid Ref: NN 07296 10076. View W



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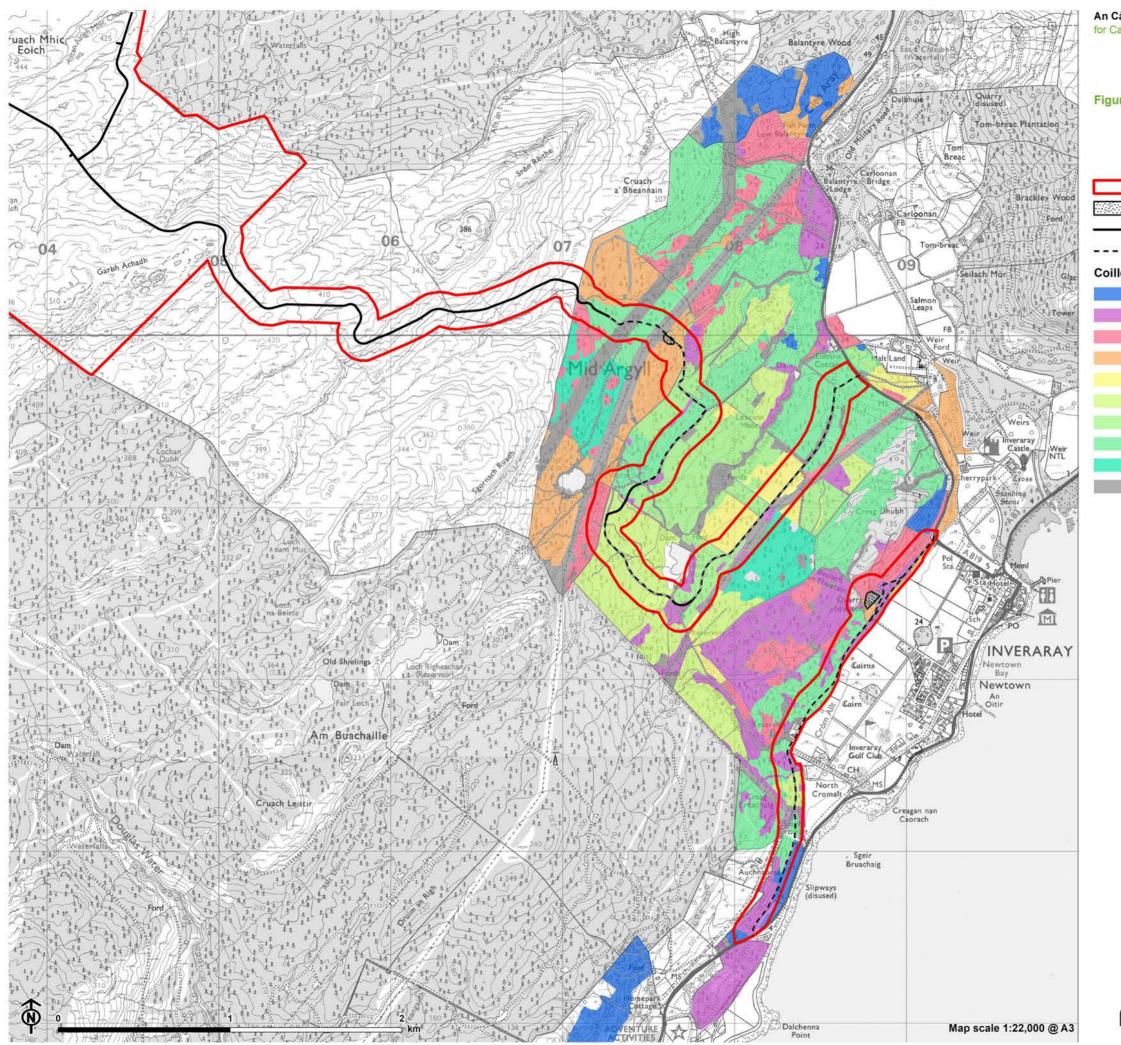
SH LUC FIG-4-1-1\_11260\_r1\_EIA\_Template\_A3L\_12/01/2023 Source: Statkraft, LUC



# Figure 4.1.1: Location - Coille Bhraghad

- Site boundary
- Coille Bhraghad
- Infrastructure footprint
- ---- Existing access track







## Figure 4.1.2: Baseline Forestry

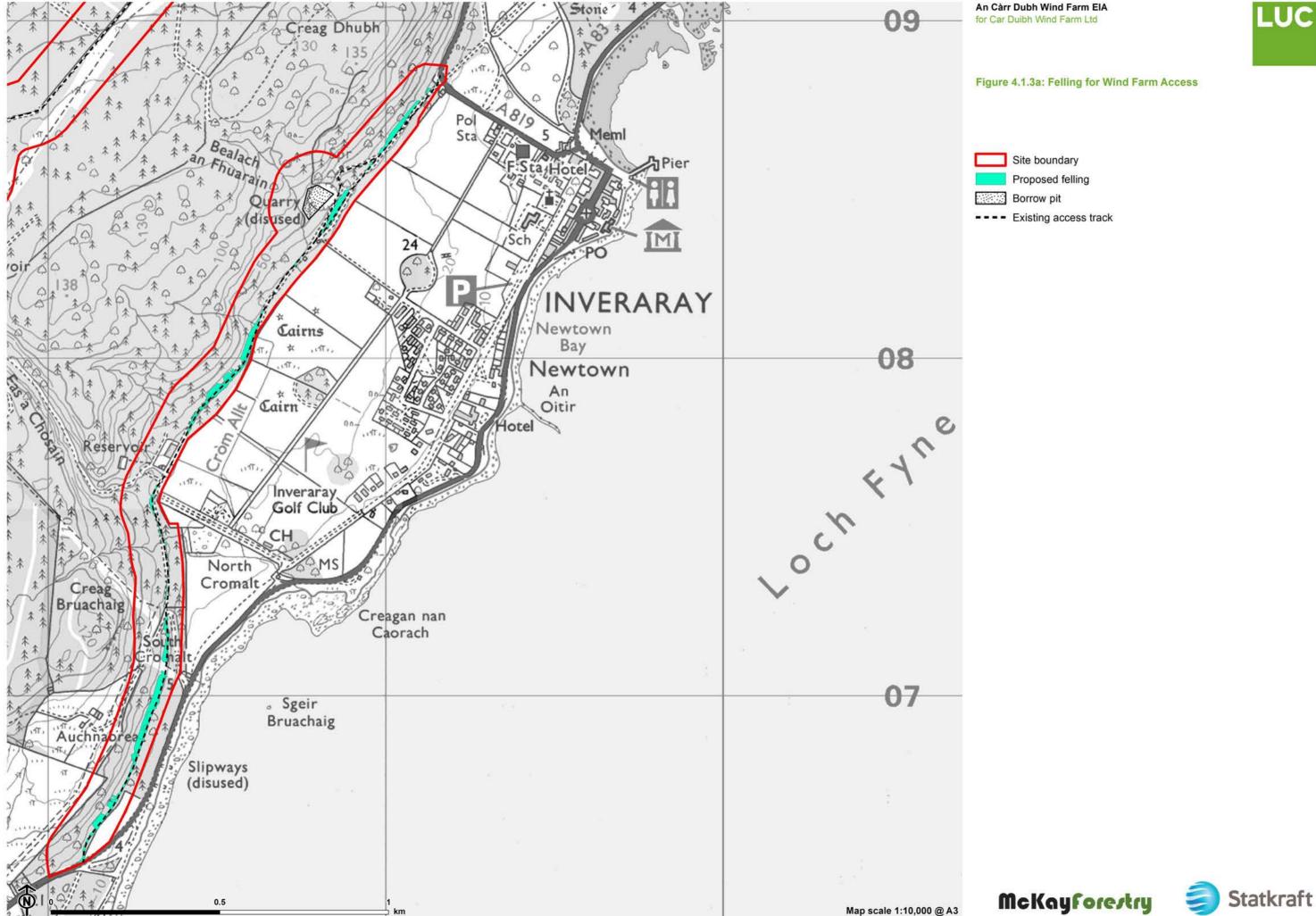
- Site boundary
- Borrow pit
  - Proposed track
- ---- Existing access track

# Coille Bhraghad (age class)

- Pre 1950
- 1950-1959
- 1960-1969
- 1970-1979
- 1980-1989
- 1990-1999
- 2000-2009
- 2010-2019
- 2020-present
- Open ground

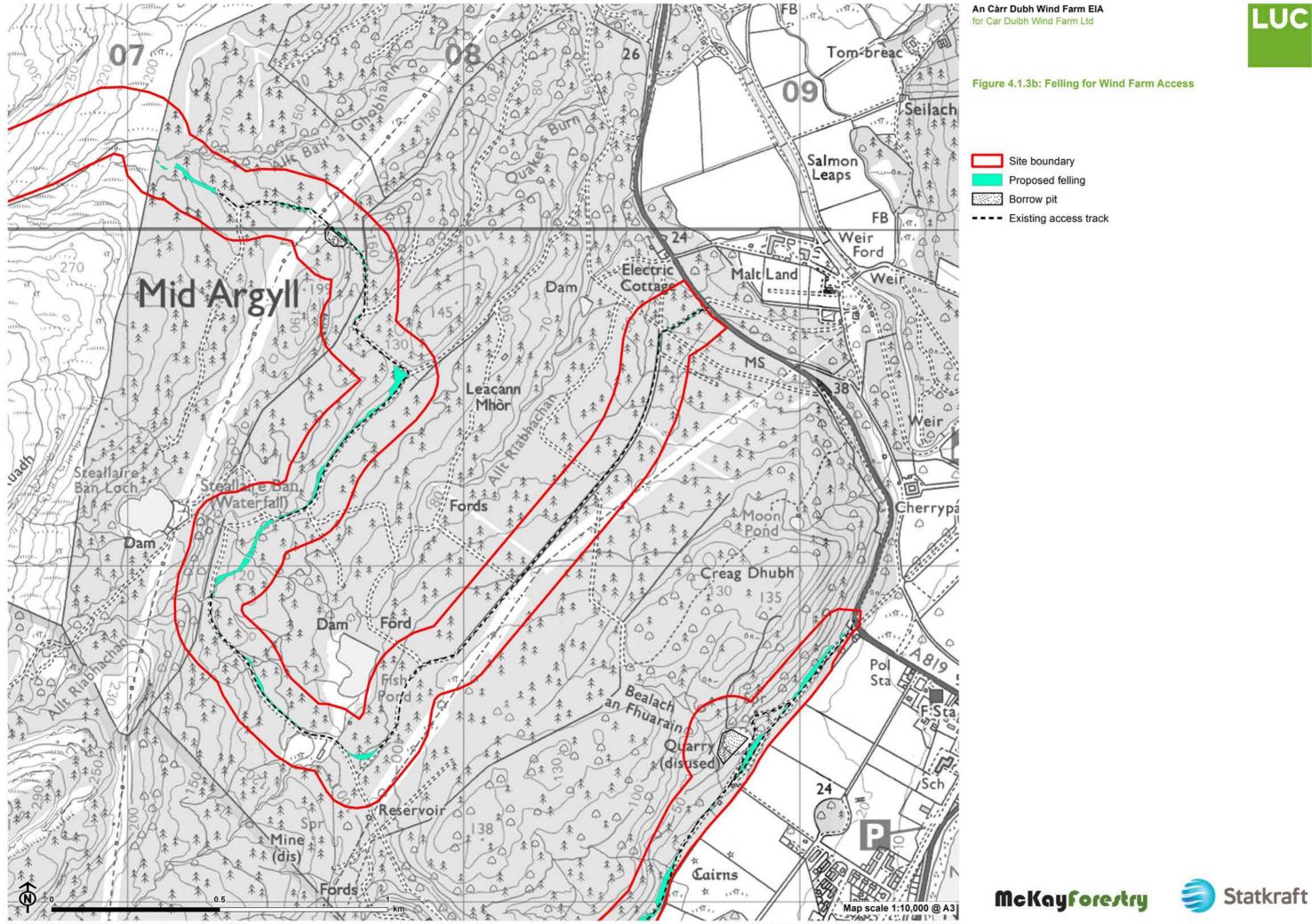






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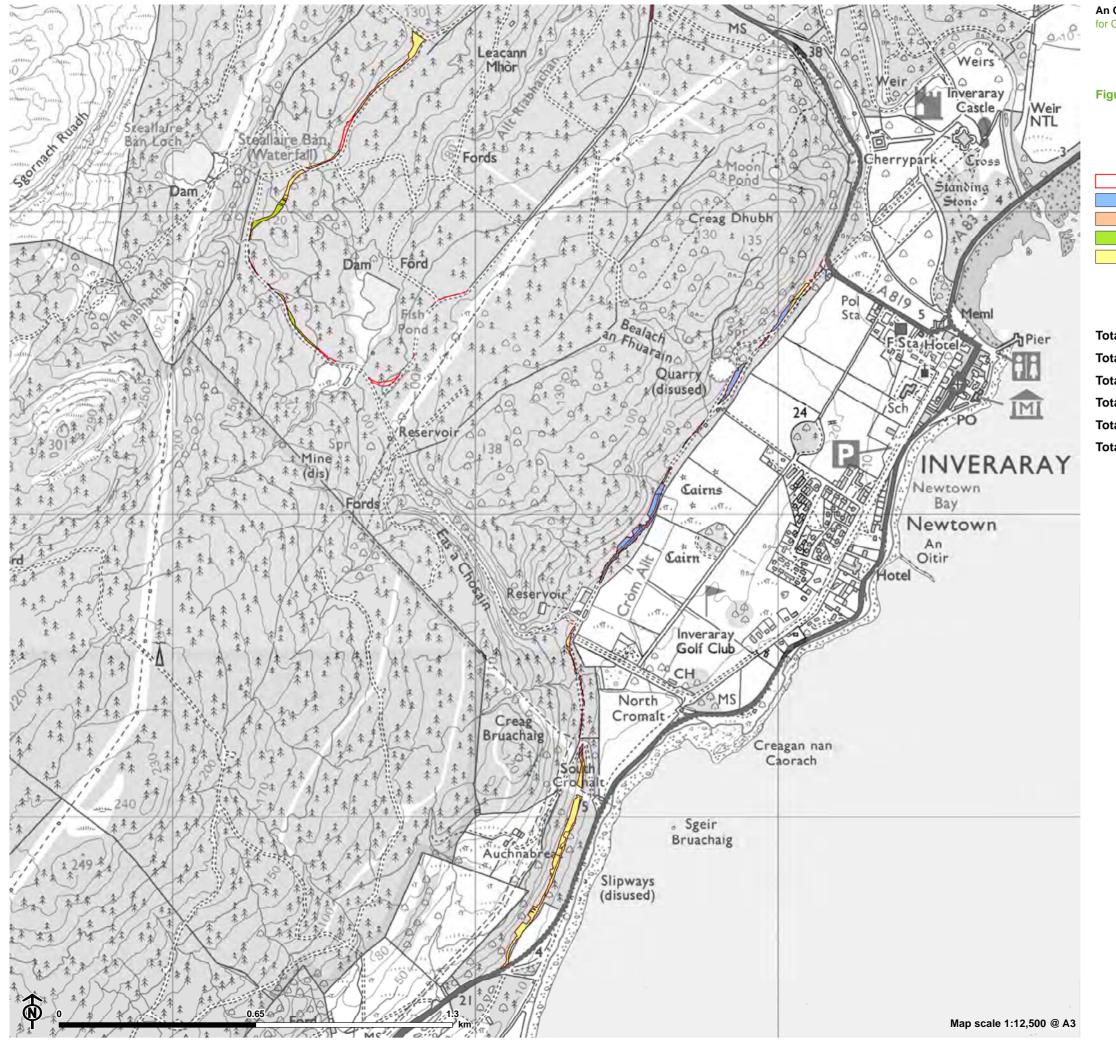




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SH LUC FIG-4-1-3b\_11260\_r1\_EIA\_Template\_A3L\_12/01/2023 Source: Statkraft, LUC





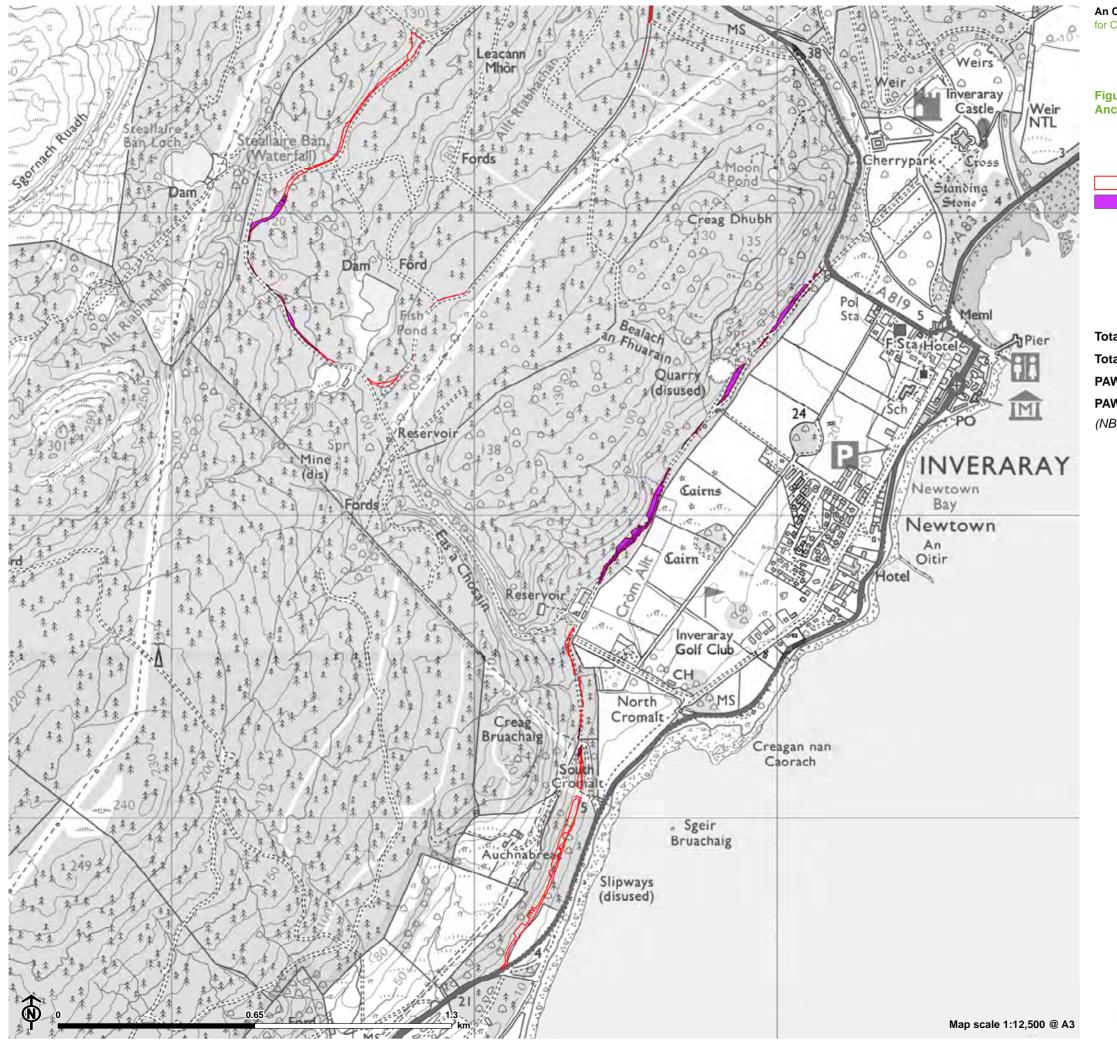
## Figure 4.1.4a: Felling within Ancient Woodland

Proposed felling area AWI 1a AWI 1b AWI 2a AWI 2b

Total proposed felling area: 3.77 ha Total AWI proposed to be felled: 3.19 ha Total AWI 1a proposed to be felled: 1.02 ha Total AWI 1b proposed to be felled: 0.05 ha Total AWI 2a proposed to be felled: 0.33 ha Total AWI 2b proposed to be felled: 1.79 ha







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An Càrr Dubh Wind Farm EIA for Car Duibh Wind Farm Ltd



Figure 4.1.4b: Felling within Planted Woods on **Ancient Woodland Sites** 

> Proposed felling area PAWS (incl. AWI)

Total proposed felling area: 3.77 ha Total PAWS proposed to be felled: 1.48 ha PAWS (incl: AWI) proposed to be felled: 1.47 ha PAWS (excl: AWI) proposed to be felled: 0.01 ha (NB: not visible at current scale, see 1:2,000 map)



